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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/657,661	09/08/2000	Loren G. Knutson	068520.0112	3017

7590 04/02/2004		EXAMINER	
Baker Botts LLP		SHRADER, LAWRENCE J	
2001 Ross Avenue		ART UNIT	PAPER NUMBER
Dallas, TX 75201-2980		2124	10
		DATE MAILED: 04/02/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _08 January 2004_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1,3,4 and 6-22_ is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1,3,4 and 6-22_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some * c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _#9, 1/09/2004_.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1. This action is in response to the amendment filed on January 8, 2004.

2. Per Applicant's request claims 1, 4, and 11 have been amended, claims 2 and 5 have been canceled, and new claims 21 and 22 have been added. Claims 1, 3, 4, and 6 – 22 are now pending.

3. Claims 2 and 5 are cancelled.

Specification

4. The objection made in the prior Office Action regarding the use of USPTO Form 1449 for the cited references is withdraw in view of the "Supplement to Information Disclosure Statement Filed 11/06/2000" received on January 8, 2004 as paper #11 and considered.

Claim Rejections - 35 USC § 112

5. The specification objection made in the prior office action is withdrawn in view of the amendments to claims 1 and 4.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7.   Claims 1, 3; 4, 6; 7; 14; and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fowlow et al., U.S. Patent 6,083,277 in view of Hasegawa et al., U.S. Patent 6,333,752 (art of record, hereinafter referred to as Hasegawa).

In regard to claim 1, Fowlow discloses a means of providing a set of distinct predetermined function definitions comprising:

"A plurality..." Fowlow discloses a plurality of function portions comprised of components having methods performing specific predetermined functions, having an input port and an output port (by which information is obtained and sent) related by the corresponding function definition (Abstract; column 2, lines 1 – 30; e.g., Figure 3). An interface defines a protocol of behavior (predetermined functions) with a set of constant and method definitions contained within an interface that can be implemented by any class anywhere in the class hierarchy. When a class implements an interface, the class agrees to implement all the methods (a function portion corresponding to a function definition) defined in the interface.

"A further portion..." Fowlow discloses that the interface is retrieved to determine the both the destination portion (plugs) and the source portion (sockets), as well as the input and output ports through which the data is supplied and produced (Abstract; column 2, lines 1 – 60; e.g., Figure 3).

"Binding information..." Information is processed and an input is associated with a respective output wherein Fowlow discloses that the interface is retrieved to determine the both

the destination portion (plugs) and the source portion (sockets), as well as the input and output ports through which the data is supplied and produced (Abstract; column 2, lines 1 – 60; e.g., Figures 4 and 5).

"wherein said function definitions identifies a separate application program...wherein execution of said one function portion causes execution of said one function portion in a manner which affects data present in said one function portion, and wherein said data in said one function portion is image data;" Fowlow discloses connection links between separate components causing storing and execution of a definition (described in the interface of the object component; Abstract, e.g., Figures 4 and 5). Each component is an object, inherently behaving as a function or operation encoded in software accessing the internal state of the object. In this sense Fowlow discloses a separate application wherein the method of the object constitutes a command to another application (object) in a manner that affects the data (e.g., Figure 3; column 6, line 54 to column 7, line 10); but Fowlow does not explicitly disclose image data acted upon by the predetermined functions. However, Hasegawa discloses image data processing managing parameters for image display. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the Fowlow invention providing a set of predetermined functions identifying an application program with a command that affects data being image data as disclosed by Hasegawa, because the predetermined function definitions are well suited to manage the parameters and their values as disclosed by Hasegawa in the Abstract.

"selecting as said application program an image processing program."

Fowlow discloses objects, inherently behaving as a function or operation encoded in software accessing the internal state of the object. In this sense Fowlow discloses a separate application wherein the method of the object constitutes a command to another application (object) in a manner that affects the data (e.g., Figure 3; column 6, line 54 to column 7, line 10), but Fowlow does not explicitly disclose image data acted upon by the predetermined functions. However, Hasegawa discloses image data processing managing parameters for image display. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the Fowlow invention providing a set of predetermined functions identifying an application program with a command that affects data being image data as disclosed by Hasegawa, because the predetermined function definitions are well suited to manage the parameters and their values as disclosed by Hasegawa in the Abstract.

In regard to claim 3, incorporating the rejection of claim 1:

"...*including the steps of concurrently executing said project definition and an instance of said application program.*" Fowlow discloses objects that act as project definitions having an input port and an output port (by which information is obtained and sent) related by the corresponding function definition (Abstract; column 2, lines 1 – 30; e.g., Figure 3). The method inherently runs as an application executing the method of the object.

In regard to claim 21, incorporating the rejection of claim 1:

"*wherein execution of said command by said image processing program conforms said image data to a generally similar appearance.*" An object, as disclosed by Fowlow (e.g., Figure 3), inherently represents any real world or abstract entity, therefore, an object representing an image would inherently represent an image-processing program.

In regard to claims 4, 6, and 22 (a computer-readable medium), they are rejected for the same reasons put forth in the rejection of claims 1, 3, and 21 respectively (a corresponding method).

In regard to claim 7:

"Modifying said set to include at least one custom function which is functionally different from each of said predetermined function definitions." Fowlow discloses a method for an application builder to design a custom project definition by determining previously defined object interfaces (predetermined function definitions) and connecting them accordingly to create a create a custom function different from each of the predetermined function definitions (column 6, lines 28 – 50; e.g., Figure 4).

"A plurality..." Fowlow discloses a plurality of function portions comprised of components having methods performing specific predetermined functions, having an input port and an output port (by which information is obtained and sent) related by the corresponding function definition (Abstract; column 2, lines 1 – 30; e.g., Figure 3). An interface defines a protocol of behavior (predetermined functions) with a set of constant and method definitions contained within an interface that can be implemented by any class anywhere in the class hierarchy. When a class implements an interface, the class agrees to implement all the methods (a function portion corresponding to a function definition) defined in the interface.

"*A further portion...*" Fowlow discloses that the interface is retrieved to determine the

both the destination portion (plugs) and the source portion (sockets), as well as the input and

output ports through which the data is supplied and produced (Abstract; column 2, lines 1 – 60;

e.g., Figure 3).

"*Binding information...*" Information is processed and an input is associated with a

respective output wherein Fowlow discloses that the interface is retrieved to determine the both

the destination portion (plugs) and the source portion (sockets), as well as the input and output

ports through which the data is supplied and produced (Abstract; column 2, lines 1 – 60; e.g.,

Figures 4 and 5).

In reference to claim 14 (computer-readable medium), it is rejected for the same reasons

put forth in the rejection of claim 7 (method).

8.   Claims 8 – 11; and 15 – 18 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Fowlow et al., U.S. Patent 6,083,277 in view of Davis et al. U.S. Patent 6,002,876

(hereinafter referred to as Davis).

In regard to claim 8, incorporating the rejection of claim 7 above:

"*...wherein said modifying step includes the step of creating said custom function*

definition by modifying one of said predetermined function definitions." Fowlow discloses a

plurality of functions with related inputs and outputs, but does not teach the modification of

functions. Davis teaches modification of a predetermined function (column 3, lines 17 – 28) in

order to allow a program to operate in a number of instruction sets. Therefore, it would have

been obvious to one skilled in the art at the time the invention was made to combine the method of defining a plurality of functions with related inputs and outputs as taught by Fowlow with the teaching of Davis by allowing modification of in instruction set with new functions, or updating existing functions, thus extending the utility of the project definition by providing an efficient means of upgrading the functions as taught by Davis.

In regard to claim 9, incorporating the rejection of claim 8.

"...wherein said modifying step includes the step of replacing in said set said one predetermined function definition with said custom function definition." Fowlow discloses a plurality of functions with related inputs and outputs, but does not teach the modification of functions. Davis teaches modification of a predetermined function with a user modified function (column 3, lines 17 – 28) allowing a program to operate in a number of instruction sets. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the method of defining a plurality of functions with related inputs and outputs as taught by Fowlow with the teaching of Davis by allowing modification of in instruction set with new functions, or updating existing functions, thus extending the utility of the project definition by providing an efficient means of upgrading the functions as taught by Davis (column 3, lines 17 – 28).

In regard to claim 10, incorporating the rejection of claim 8.

"...wherein said modifying step includes the step of including in said set each of said custom function definition and said one predetermined function definition." Fowlow discloses a plurality of functions with related inputs and outputs, but does not teach the modification of functions. Davis teaches modification or inclusion of a custom function (s substitute fumction)

within a set of predefined functions (column 4, lines 41 – 43) allowing a program to operate in a number of instruction sets with separate function compilations. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the method of defining a plurality of functions with related inputs and outputs as taught by Fowlow with the teaching of Davis by allowing inclusion of a custom function in an instruction set, thus extending the utility of the project definition by providing an efficient means of upgrading or modifying the function set as taught by Davis (column 3, lines 17 – 28).

> **In regard to claim 11**, incorporating the rejection of claim 8.
>
> *"Modifying source code..."*
>
> *"Compiling source code..."*
>
> *"Including said object code in said set."*

Fowlow discloses a plurality of functions with related inputs and outputs, but does not teach the modification of functions, compiling the modified code, and including the object code into the set of functions. Davis further teaches modification, compilation and inclusion of resulting object code into the function set (column 4, lines 15 – 50) in a development environment (column 5, lines 1 – 3). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to combine the method of defining a plurality of functions with related inputs and outputs as taught by Fowlow with the teaching of Davis by allowing modification of the function set with additional functions, compiling the modified code and including the resultant object code in the function set to provide an efficient way of recompiling individual functions without recompiling the entire routine as taught by Davis (column 4, lines 40 – 50).

In reference to claims 15 – 18 (computer-readable medium), they are rejected for the

same reasons put forth in the rejection of claims 8 – 11 (method) respectively.

9.   Claims 12, 13; 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Fowlow et al., U.S. Patent 6,083,277 in view of Davis et al. U.S. Patent 6,002,876 as applied to

claim to claim 11, above, and further in view of Sleep et al., U.S. Patent 6,317,648 (hereinafter

referred to as Sleep).

In regard to claims 12 and 13:

Fowlow discloses a plurality of functions with related inputs and outputs, but does not

teach the use of an off-line development environment (claim 12) that includes Visual Basic

(claim 13). Davis teaches a development environment, but not an off-line environment with

Visual Basic. Sleep teaches an off-line development environment using Visual Basic (column

32, lines 38 – 60). Therefore, it would have been obvious to one skilled in the art at the time the

invention was made to combine the method of defining a plurality of functions with related

inputs and outputs as taught by Fowlow with the teaching of Davis by allowing modification of

the function set and incorporating additional functions, compiling the modified code and

including the resultant object code in the function set, and further modified by the teaching of

Sleep by providing on off-line development environment using Visual Basic, which would

provide a well known tool to modify the functions in an environment that stores the various

configurations after creation or modification for future use as taught by Sleep (column 32, lines 51 – 52).

In reference to claims 19 and 20 (computer-readable medium), they are rejected for the same reasons put forth in the rejection of claims 12 and 13 (method) respectively.

Response to Arguments

10.   Applicant's arguments filed January 9, 2004 have been fully considered but they are not persuasive:

The Applicant has argued:

(A) "Among other aspects of Claim 1, Fowlow fails to disclose '*wherein said data in said one function portion is image data; and selecting as said application program an image processing program. As teaching these elements, the Examiner cites Figure 3 of Fowlow and states that "[a]n object . . . inherently represents a real world entity, therefore, an object that representing [sic] an image would inherently be an image–processing program." Office Action at page 7. However, Fowlow nowhere discloses, in Figure 3 or elsewhere, that an object represents an image. Moreover, an object, as the term is used in Fowlow, relates to object–oriented programming and refers to a particular portion of computer code. Furthermore, Fowlow nowhere discloses, in Figure 3 or elsewhere, an image–processing program. Thus, Fowlow simply fails to show "wherein said data in said one function portion is image data; and selecting as said application program an image processing program."

The Examiner apparently assumes that the objects disclosed in Fowlow "inherently" represent image data and that these objects "inherently" are image–processing programs. Office Action at page 7. Applicant disagrees. Moreover, while in limited circumstances an examiner may take official notice of facts not in the record or rely on "common knowledge" in making a rejection, "such rejections should be judiciously applied." M.P.E.P. §2144.03. It is not appropriate for an examiner to take official notice of facts without citing a prior art reference "where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known." Id. (citing In re Ahlert, 165 U.S.P.Q. 418, 420-21 (C.C.P.A. 1970)). To the extent that the Examiner maintains this rejection based on "Official

Notice," "well known prior art," "common knowledge," or other information within the Examiner's personal knowledge, Applicant respectfully requests that the Examiner cite a reference in support of this position or provide an affidavit in accordance with M.P.E.P. §2144.03 and 37 C.F.R. § 1.104(d)(2)."

Examiner's Response:

The Applicant's argument is moot in view of the new grounds of rejection.

(B) "Among other aspects of Claim 7, Fowlow fails to disclose, "modifying said set to include at least one custom function definition which is functionally different from each of said predetermined function definitions." As teaching this element, the Examiner cites Fowlow's discussion of identifying and retrieving existing and previously defined objects to reuse these objects when developing new software applications. Fowlow, Col. 6, lines 28-51. However, this merely shows selecting existing code and reusing it in a new application. Reusing existing code simply does not show "modifying said set to include at least one custom function definition which is functionally different from each of said predetermined function definitions."

Examiner's Response:

The Applicant points to the Fowlow discussion identifying and retrieving existing and *previously defined objects* to reuse these objects when developing new software applications. Fowlow discloses a method for an application builder to design a custom project definition by: determining previously defined object interfaces (predetermined function definitions) and connecting them accordingly (modifying) to create a custom function (services) different from each of the predetermined function definitions (column 6, lines 28 – 50; e.g., Figure 4).

Consequently, the claim language reads on the process occurring in Fowlow.

Conclusion

11.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Shrader whose telephone number is (703) 305-8046. The examiner can normally be reached on M-F 08:00-16:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (703) 305-9662. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Lawrence Shrader
Examiner
Art Unit 2124

March 13, 2004

TODD INGBERG
PRIMARY EXAMINER